

Cables for Industrial Applications Phone: 01908 250840 iandi.sales@nexans.com

SIWO-KUL® B10 3.3/4.2 kV

SIWO-KUL® B10 3.3/4.2 kV MV high temperature flexible cables designed with a PET braid, PUR varnished

Description

SIWO-KUL® B10 cables are required when high flexibility and high temperature conditions are present; they are mainly used in medium-voltage motors and generators for connecting stator coils to the terminal box. They are also vital elements for wind converters, transformers, solar power inverters and other MV/LV cabinets. In drives, silicone decreases copper cross-section and gives flexibility for compactness.

SIWO-KUL® B10 13.3/4.2 kV cables are class 5 single core cables.

This product family is designed with a **PET braid, PUR varnished** providing our customers much flexibility according to their process (VPI...).

Construction

- Copper conductor tinned, flexible IEC 60228, class 5
- · Silicone rubber insulation
- · Separator tape
- · Protective synthetic yarn braiding, PUR varnished

The use of silicone rubber, a high grade corona resistant insulation material, gives the cable excellent dielectric strength. The braided synthetic yarn covering, which is applied directly over the insulation, gives the cable, because of its short braiding pitch and high compactness, an excellent mechanical protection by maintaining good flexibility.

Operating temperature for continuous service extends from -55°C up to 180°C.

This product family is also part of our Windlink® offer for Wind turbines.

Approvals

These cables are UL (Underwriters Laboratories inc.) approved for Appliance Wiring Material (AWM), following styles 3640, 3641, 3642 and 3643, CSA File No.: 036040-0-000.

SIWO-KUL® B10 cables are in compliance with EU directives on the limits of certain metals and waste as defined on ROHS (Restriction of Hazardous Substances) and WEE (Waste from Electrical and Electronic Equipment). **SIWO-KUL® B10** is REACH conform substances benzene, C10-C13).





Standards

International IEC 60092; IEC 60331; IEC 60332-1; IEC 60332-3 Cat.C; IEC 60332-3-24; IEC 60754-1; IEC 60754-2; IEC 61034; IEEE 383; LLOYDS Reg. 91/00126(E1); UIC 895

National BSS 6195-T5-C-D-E-F; CSA C22.2 N° 210-05; DIN VDE 0472; NF F 16-101/BF1



Yes

erating temperatu

Operating temperature, range -55 .. 180 °C



Chemical resistance Good



Oil resistance Yes



Flame retardant IEC 60332-1



Fire retardant IEC 60332-3



Fire resistant IEC 60331



Gases corrosivity IEC 60754-1, IEC



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Characteristics

| Construction characteristics | | | | |
|------------------------------|--------------------------|--|--|--|
| Halogen free | Yes | | | |
| Dimensional characteristics | | | | |
| Precision of diameter | +/- 0.3 mm | | | |
| Usage characteristics | | | | |
| Operating temperature, range | -55 180 °C | | | |
| Chemical resistance | Good | | | |
| Oil resistance | Yes | | | |
| Flame retardant | IEC 60332-1 | | | |
| Fire retardant | IEC 60332-3 | | | |
| Fire resistant | IEC 60331 | | | |
| Gases corrosivity | IEC 60754-1, IEC 60754-2 | | | |
| Smoke density | IEC 61034 | | | |
| Ozone resistance | Yes | | | |
| U.V resistance | Yes | | | |
| | | | | |

Product List

| Nexa ref. | ans | Name | Operating voltage (kV) | Conductor cross-section (mm²) | Nominal outer diameter (mm) |
|---------------|-------|------------------------------------|------------------------|-------------------------------|-----------------------------|
| 晶 1014 | 18775 | SIWO-KUL B10 1x2.5 3,3/4,2kV RD | 3.3 | 2.5 | 6.3 |
| \ 1014 | 18776 | SIWO-KUL B10 1x4.0 3,3/4,2kV GY | 3.3 | 4 | 6.8 |
| 晶 1014 | 18756 | SIWO-KUL B10 1x6.0 3,3/4,2kV RD | 3.3 | 6 | 7.25 |
| 晶 1014 | 18757 | SIWO-KUL B10 1x10 3,3/4,2kV RD | 3.3 | 10 | 8.2 |
| 晶 1014 | 18758 | SIWO-KUL B10 1x16 3,3/4,2kV RD | 3.3 | 16 | 10.35 |
| 晶 1014 | 18759 | SIWO-KUL B10 1x25 3,3/4,2kV RD | 3.3 | 25 | 12.0 |
| 晶 1014 | 18752 | SIWO-KUL B10 1x 35 3,3/4,2kV RD | 3.3 | 35 | 13.2 |
| 晶 1014 | 18762 | SIWO-KUL B10 1x50 3,3/4,2kV RD | 3.3 | 50 | 15.4 |
| 晶 1014 | 18760 | SIWO-KUL B10 1x70 3,3/4,2kV RD | 3.3 | 70 | 17.25 |
| 晶 1014 | 18763 | SIWO-KUL B10 1x95 3,3/4,2kV RD | 3.3 | 95 | 19.2 |
| | | | | \ = M | ake to order, 🗸 = In stock |

















Operating temperature, range -55 .. 180 °C

Chemical resistance Good

resistance

retardant IEC 60332-1

IEC 60332-3

Fire resistant IEC 60331

Gases corrosivity IEC 60754-1, IEC



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| | Nexans ref. | Name | Operating voltage (kV) | Conductor cross-section (mm²) | Nominal outer diameter (mm) |
|---|-------------|------------------------------------|------------------------|-------------------------------|-----------------------------|
| 品 | 10148753 | SIWO-KUL B10 1x120 3,3/4,2kV RD | 3.3 | 120 | 21.15 |
| 品 | 10148754 | SIWO-KUL B10 1x150 3,3/4,2kV RD | 3.3 | 150 | 23.1 |
| 晶 | 10148766 | SIWO-KUL B10 1x185 3,3/4,2kV RD | 3.3 | 185 | 25.1 |
| 晶 | 10148755 | SIWO-KUL B10 1x240 3,3/4,2kV RD | 3.3 | 240 | 27.5 |
| | | | | \ = M | ake to order, 晶 = In stock |

Permissible continuous current carrying capacity 3kV

Cables separated: 1D

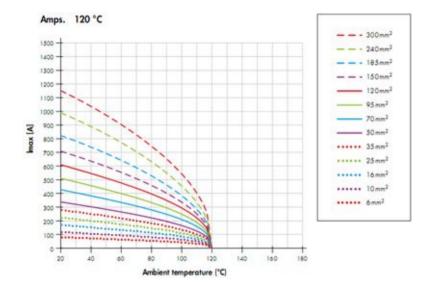
The values determined from the diagram are based on the following assumptions:

a) Cables separated.

Space between adjacent cables ≥ 1 x d.

- b) Conductor temperature = See tables below
- c) Without additional cooling.

Suffcient natural air fow ensured.





Operating temperature, range -55 .. 180 °C



Chemical resistance Good



Oil resistance Yes



Flame retardant IEC 60332-1



Fire retardant IEC 60332-3



Fire resistant IEC 60331

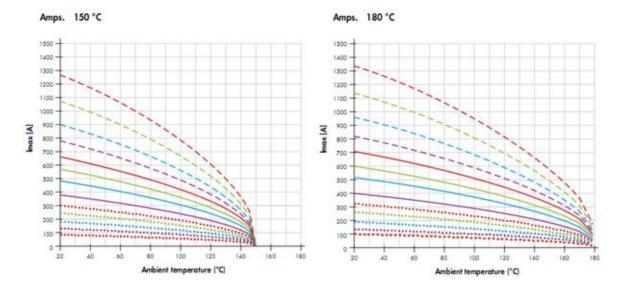


Gases corrosivity IEC 60754-1, IEC



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Selling information

Marking

Our SIWO-KUL® B10 cables have been printed: NEXANS SWITZERLAND SIWO-KUL® B10 + voltage in kV + section in mm² + Standards + Meter marks



Halogen free Yes



Operating temperature, range -55 .. 180 °C



Chemical resistance Good



Oil resistance



Flame retardant IEC 60332-1



Fire retardant IEC 60332-3



Fire resistant IEC 60331



Gases corrosivity IEC 60754-1, IEC 60754-2